

What is claimed is:

1. A method of grouping parts in inventory, comprising:  
defining a database for indicating functional relationships between  
a plurality of parts; and  
5 searching the database to identify one or more groups of  
functionally interchangeable parts.
2. The method of claim 1, wherein the step of searching includes:  
repeatedly searching the database to produce a list of parts that  
10 can be used interchangeably.
3. A method of generating a list of interchangeable parts, comprising:  
defining a first table identifying a plurality of parts;  
defining a second table, associated with the first table, indicating  
15 functional relationships between the parts; and  
recursively searching the first and second tables to generate the list  
of interchangeable parts.
4. The method of claim 3, further comprising:  
20 receiving a part identifier.
5. The method of claim 4, wherein the step of recursively searching  
includes:  
applying the part identifier to the first table to retrieve a functional  
25 relationship from the second table, the functional relationship specifying an  
additional part identifier; and  
applying the additional part identifier to the first table to retrieve an  
additional functional relationship from the second table.

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6. A parts inventory system, comprising:  
a database for indicating functional relationships between a plurality of parts; and  
a search engine for searching the database to identify one or more groups of functionally interchangeable parts.

7. The parts inventory system of claim 6, wherein the database includes:  
a first table identifying the parts; and  
a second table, associated with the first table, indicating the functional relationships between the parts.

8. The parts inventory system of claim 7, wherein the search engine recursively searches the first and second tables to generate the list of interchangeable parts.

9. The parts inventory system of claim 7, wherein the search engine includes:  
means for applying a part identifier to the first table to retrieve a functional relationship from the second table, the functional relationship specifying an additional part identifier; and  
means for applying the additional part identifier to the first table to retrieve an additional functional relationship from the second table.

10. The parts inventory system of claim 6, further comprising:  
an input interface for receiving a part identifier.

- 5           11. The parts inventory system of claim 6, further comprising:  
a network interface permitting remote users to generate a list of  
interchangeable parts.

- 10           12. The parts inventory system of claim 6, further comprising:  
a remote workstation for communicating with the search engine  
over a communication network.

- 15           13. A computer program product in a computer-usable medium,  
comprising:  
means for defining a database for indicating functional  
relationships between a plurality of parts; and  
means for searching the database to identify one or more groups of  
functionally interchangeable parts.

- 20           14. The computer program product of claim 13, wherein the searching  
means includes:  
means for repeatedly searching the database to produce a list of  
parts that can be used interchangeably.

15. The computer program product of claim 13, comprising:  
means for defining a first table identifying the parts;  
means for defining a second table, associated with the first table,  
5 indicating the functional relationships between the parts; and  
means for recursively searching the first and second tables to  
generate a list of the interchangeable parts.

16. The computer program product of claim 15, further comprising:  
10           mean for applying a part identifier to the first table to retrieve a  
functional relationship from the second table, the functional relationship  
specifying an additional part identifier; and  
              means for applying the additional part identifier to the first table to  
retrieve an additional functional relationship from the second table.

Figure 1. The proposed model of the effect of the perceived effort on the perceived exertion.